This transparency is from last presentation:

Realistic MC for the B

- Corrections and upgrades from previous sample:
  - Silicon noise correctly simulated
  - Displaced vertex using DB and GenPrimVertMods
  - Silicon mis-alignment in Simulation (for svtsim)
    - Within a Ray: internal degrees of freedom within a ladder (bow, relative tilt) are not simulated but corrections are applied in Production

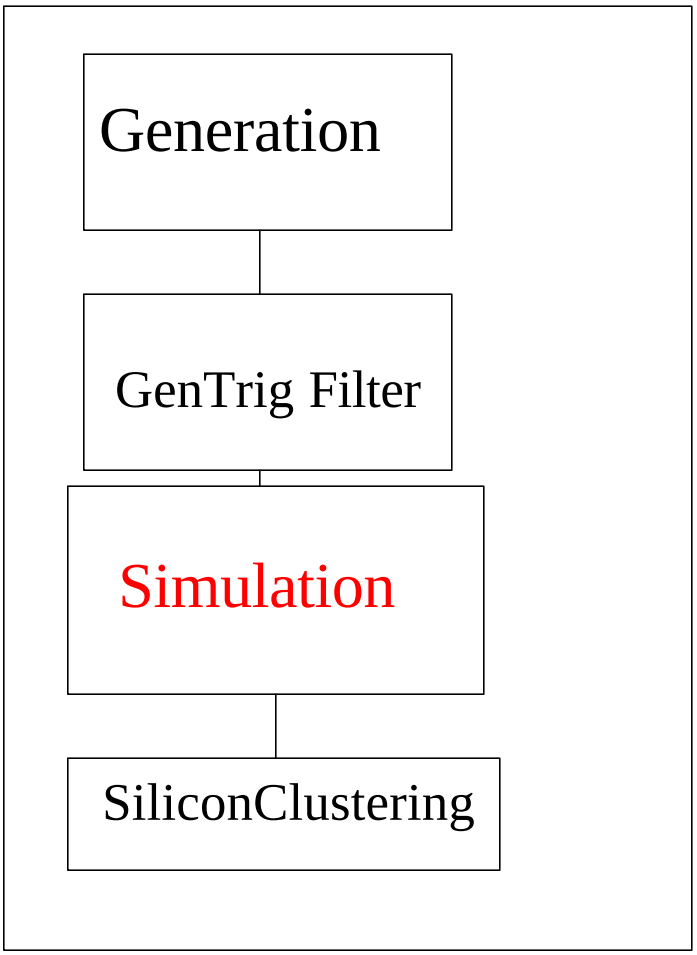
Taken care of in 4.9.1preX

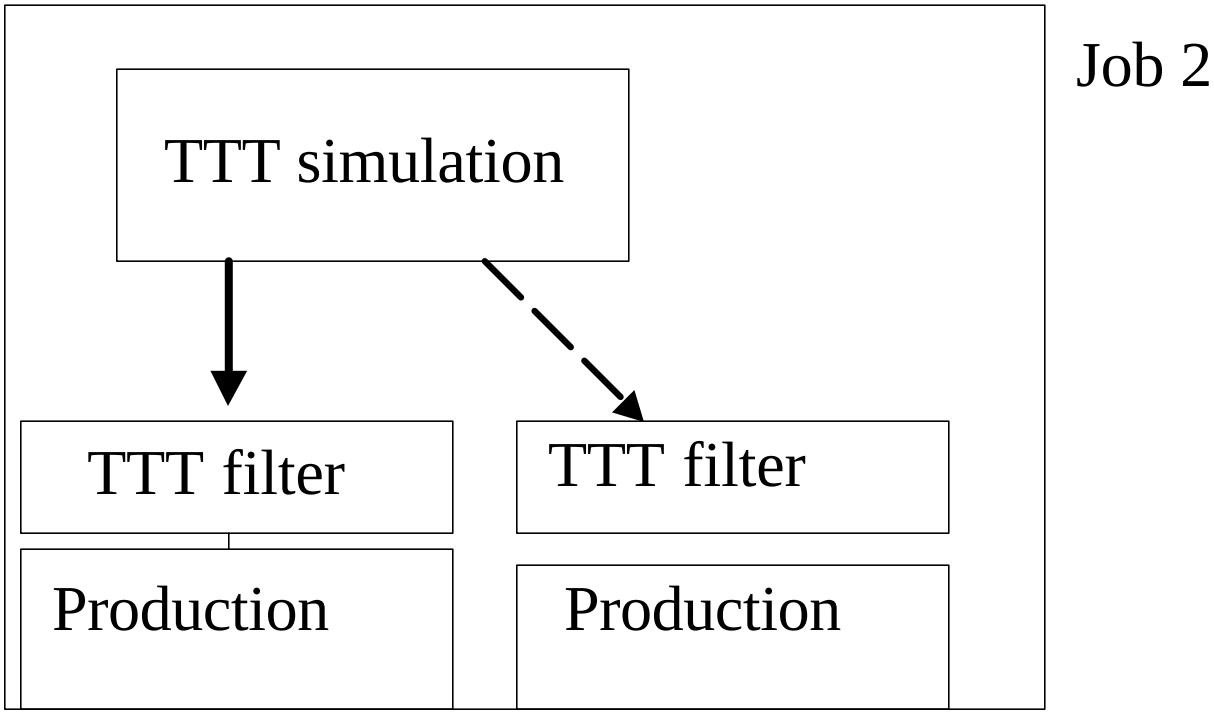
- In progress:
  - ✓ – Full trigsim (in particular svtsim)
  - ✓ – Event filtering based on trigsim

- Plan:
  - Simulate multiple runs (eg. 150799: 3 pb^{-1})
  - Simulate multiple runs in the same job, weighted by their luminosity
  - Complete validation on MCrun 142110 *In progress*
  - Enter sample in DataFileCatalog
  - Generate l+svt test sample *Waiting for sw*
  - ✓ – Generate cc test sample

Realistic MC for the B

- TrigSim included in runMC
  - #include "XFTSim/XFTSim.hh"
  - #include "XTRPSim/XTRPSimModule.hh"
  - #include "svtsim/svtsimmodule.hh"
  - //SDA for svtsim
  - #include "L1GlobalTrigger/L1GlobalTriggerMaker.hh"
  - #include "L2GlobalTrigger/L2SimModule.hh"
  - //SDA for svtfilter
  - #include "SemiLeptonicB/svtfilter.hh"
  - #include "SemiLeptonicB/SimPrereq.hh"
- Event filtering has low efficiency:
  - 2% on simulated events (on “pi-pi”stream)
  - Simulation takes 38 s/evt → 1 evt/hour on a 700 MHz pentium
- Need to adjust cuts at generator level and at GenTrig level to maximize efficiency and minimize bias.
- Sample of 100k bb with loose cuts is being produced now.
- CC sample produced (15k events)


Job 1
Generation
GenTrig Filter
Simulation
SiliconClustering


Job 2
TTT simulation
TTT filter
TTT filter
Production
Production